

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 14 and 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 14 recites the limitation "the hydraulic loading area" in line 2. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 19 recites the limitation "said fish raising tank" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 3, 10, 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Shindell (US Pat No 3,342,340).

Shindell teaches a. a water inlet (connected to 12) defining a proximal end of the chamber; b. a water outlet (connected 17) defining a distal end of the chamber; c. means for water distribution (55) within the chamber; d. filtration medium (50, 52) for filtering water passing through the chamber; e. at least one braker grid (53; col. 4, lines 31-36) for preventing water channeling within the chamber, wherein said braker grid is positioned substantially distally to said means for water distribution.

Regarding claims 13 and 14, it is submitted that the claimed hydraulic loading is a recitation of intended use that fails to add any structure to the claimed apparatus and, accordingly, fails to patentably distinguish the instant invention over the prior art.

8. Claims 1, 5-6, 10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Good et al. (US Pat No 5,595,653).

Good et al. teach a. a water inlet (20) defining a proximal end of the chamber; b. a water outlet (22) defining a distal end of the chamber; c. means for water distribution (16a) within the chamber; d. filtration medium (14, 18A, 18B) for filtering water passing through the chamber; e. at least one braker grid (16b) for preventing water channeling within the chamber, wherein said braker grid is positioned substantially distally to said means for water distribution.

Regarding claims 13 and 14, it is submitted that the claimed hydraulic loading is a recitation of intended use that fails to add any structure to the claimed apparatus and, accordingly, fails to patentably distinguish the instant invention over the prior art.

9. Claims 1, 10, 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schwalge (US Pat No 2,765,259).

Schwalge teaches a. an inlet (13) defining a proximal end of the chamber; b. an outlet (47e) defining a distal end of the chamber; c. means for liquid distribution (32, 35) within the chamber; d. filtration medium (34) for filtering liquid passing through the chamber; e. at least one braker grid (69) for preventing liquid channeling within the chamber, wherein said braker grid is positioned substantially distally to said means for liquid distribution.

Regarding the limitation that the apparatus is for filtering water, it is submitted that the recitation is one of intended use that fails to add structure to the claimed apparatus. If it is applicant's position that the limitation somehow adds structure to the claimed apparatus, it is submitted that the apparatus of Schwalge is capable of filtering water.

Regarding claims 13 and 14, it is submitted that the claimed hydraulic loading is a recitation of intended use that fails to add any structure to the claimed apparatus and, accordingly, fails to patentably distinguish the instant invention over the prior art.

10. Claims 1, 3, 5-7, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Lucas, III (US Pat No 4,606,823).

Lucas, III teaches a. an inlet (69) defining a proximal end of the chamber; b. an outlet (connected to 62) defining a distal end of the chamber; c. means for liquid distribution (42) within the chamber; d. filtration medium (47,48,49,50,51) for filtering liquid passing through the chamber; e. at least one braker grid (53) for preventing liquid channeling within the chamber, wherein said braker grid is positioned substantially distally to said means for liquid distribution.

Regarding claims 13 and 14, it is submitted that the claimed hydraulic loading is a recitation of intended use that fails to add any structure to the claimed apparatus and, accordingly, fails to patentably distinguish the instant invention over the prior art.

11. Claims 1, 13, 14, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Quick, Jr. (US Pat No 4,427,548).

Quick, Jr. teaches a. an inlet (connected to 19) defining a proximal end of the chamber; b. an outlet (connected to 34) defining a distal end of the chamber; c. means for liquid distribution (20) within the chamber; d. filtration medium (36) for filtering liquid passing through the chamber; e. at least one braker grid (32) for preventing liquid channeling within the chamber, wherein said braker grid is positioned substantially distally to said means for liquid distribution and means (16) for supplying water from the filtration system to an aquaculture tank..

Regarding claims 13 and 14, it is submitted that the claimed hydraulic loading is a recitation of intended use that fails to add any structure to the claimed apparatus and, accordingly, fails to patentably distinguish the instant invention over the prior art.

12. Claims 1, 10-11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Rajan et al. (US Pat No 5,635,063).

Rajan et al. teach a. an inlet (30) defining a proximal end of the chamber; b. an outlet (56) defining a distal end of the chamber; c. means for liquid distribution (80) within the chamber; d. filtration medium (88,92,108,114,118) for filtering liquid passing through the chamber; e. at least one braker grid (104) for preventing liquid channeling within the chamber, wherein said braker grid is positioned substantially distally to said means for liquid distribution.

Regarding claims 13 and 14, it is submitted that the claimed hydraulic loading is a recitation of intended use that fails to add any structure to the claimed apparatus and, accordingly, fails to patentably distinguish the instant invention over the prior art.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of the primary references above.

14. The primary references are described above. None of the references explicitly disclose the size of the openings in the grid. It is submitted that it is well within the purview of the skilled artisan to provide openings within the recited range in order to, for example, ensure that there is adequate flow through the grid while still maintaining support for the filter medium.

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of the primary references above in view of Timmons (US Pat No 6,666,965).

The primary references are described above. None of the references disclose utilizing nozzles.

In any case, Timmons disclose the well known concept of providing nozzles (60) in order to, for example, evenly distribute water over filter media. Accordingly, it would have been readily obvious for the skilled artisan to modify the apparatus of any one of the primary references such that it includes nozzles in order to, for example, evenly distribute water over filter media.

Allowable Subject Matter

16. Claims 2, 4, 8, 15-17 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED PRINCE whose telephone number is (571)272-1165. The examiner can normally be reached on Monday-Thursday, 6:30-4:00; alt. Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fred Prince/
Primary Examiner, Art Unit 1797

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